Application No.: 10/566,207 Amendment under 37 CFR §1.116 Art Unit: 1793 Attorney Docket No.: 053484

AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1-6 (Cancelled).

7. (Currently Amended): A method for manufacturing a catalyst used for steam reforming of methanol: comprising the steps of

pulverizing a bulky Al alloy having a quasicrystalline phase or a related crystalline phase thereof, the quasicrystalline phase being represented by the formula: Al_{100-y-z}Cu_yTM_z, where y is in the range of 10 to 30 atomic percent, z is in the range of 5 to 20 atomic percent, and TM indicates at least one of transition metals other than Cu, thereby obtaining Al alloy particles; and

performing leaching treatment for the Al alloy particles with an aqueous alkaline solution containing one of sodium hydroxide (NaOH), sodium carbonate (Na₂CO₃), and sodium hydrogen carbonate (NaHCO₃), wherein leaching conditions of the leaching treatment the concentration and the temperature thereof are adjusted in the range of 2 to 15 percnet by weight and in the range of 0 to 90 °C respectively, to form oxide surface layers, which contain fine Cu particles dispersed therein and which are composed of an Al oxide and a transition metal oxide, on surfaces of the Al alloy particles; and

performing heat treatment of the leached Al alloy particles in an oxidizing atmosphere so that some or all substantially all of the fine Cu particles are converted into fine copper oxide particles, whereby the catalyst used for steam reforming of methanol is manufactured so as to

- 2 -

Application No.: 10/566,207 Amendment under 37 CFR §1.116 Art Unit: 1793 Attorney Docket No.: 053484

have Al alloy particles provided with oxide surface layers containing the fine copper oxide

particles.

8. (Previously present): The method for manufacturing a catalyst according to Claim 7,

wherein the copper oxide in the surface oxide layers obtained by the heat treatment in an

oxidizing atmosphere after the leaching treatment is CuO or a Cu(TM_xAl_{1-x})₂O₄ spinel compound,

where $0 \le x \le 1.0$.

9. (Previously present): The method for manufacturing a catalyst according to Claim 7,

wherein the temperature of the aqueous alkaline solution is in the range of 40 to 90°C.

10. (Cancelled).

11. (Previously present): The method for manufacturing a catalyst according to Claim 7,

wherein an amount leached out of the Al alloy particles by the leaching treatment using the

aqueous alkaline solution is in the range of 0.5 to 40 percent by weight.

12. (Cancelled).

- 3 -